

1995.74509

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent Application)
Applicant: Brian Smith)
Serial No. 10/565,317)
Conf. No. 7637)
Filed: January 19, 2006)
For COMPOSITE BUILDING PANEL AND)
METHOD OF MAKING COMPOSITE PANEL)
Art Unit: 3635)
Examiner: Eppes, Bryan)

DECLARATION OF BRIAN SMITH UNDER 37 C.F.R. § 1.132

I, Brian Smith, 410 LaCosta Avenue, Encinitas California, 92024, declare as follows:

1. I graduated as a Chartered Accountant from the Institute of Chartered Accountants in Perth, Australia. From 1979 to 1980 I attended the University of California Los Angeles Graduate School of Management. In September 2003 I founded Ecolite Concrete Services, a DBA that would become Ecolite Concrete USA, a building systems technology company that licenses technologies for designing and fabricating wall systems for commercial, municipal, and government construction, typically on a large scale. I currently serve as Chairman of the Board and I direct Ecolite's Licensing Sales. My experience in the concrete wall systems industry spans about 13 years.

2. I am the named inventor of U.S. Patent Application No. 10/565,317 (“the ‘317 Application”).

3. I understand that claims 1-8 of the ‘317 Application presently stand rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 3,802,147 to O’Konski (“the ‘147 Patent”) in view of U.S. Patent No. 5,494,513 to Fu et al. (“the ‘513 Patent”).

4. I understand that, with the Amendment accompanying the submission of this Declaration, independent claims 1, 25 and 29 include the features below (referred collectively herein as “the claimed density” feature):

Claim 1: “a concrete slab having a density of 400 to 1760 kg/m³ (25 to 110 pcf)”

Claim 25: “wherein the concrete slab has a density of 400 to 1760 kg/m³ (25 to 110 pcf)”

Claim 29: “a concrete slab having a density of 960 to 1200 kg/m³ (60 to 75 pcf)”

5. I have personal knowledge of most concrete wall systems being produced and installed in the U.S. over the last ten years.

6. I have reviewed the ‘147 and the ‘513 Patents. In my opinion, neither the ‘147 Patent nor the ‘513 Patent disclose the use of concrete having the claimed density feature (25 to 110 pcf, or 60 to 75 pcf), in the context of a composite frame embedded in a

concrete panel.

7. Concrete of the claimed density is a different product from conventional heavy concrete. The claimed density cannot be attained by merely discovering optimal or working ranges of conventional concrete. Concrete of the claimed density differs from conventional heavy concrete in that an additional element, such as foam, is combined to the mixture of aggregate and cement.

8. In my opinion, the '147 Patent doesn't disclose lightweight or aerated concrete, and cannot achieve the stated density range merely by "optimizing" the constituents disclosed in the reference.

9. I am familiar with lightweight concrete being used in construction. The '513 Patent discloses the use of lightweight concrete in construction, but does not mention embedding frame members and a reinforcing layer into the lightweight concrete, as claimed in the '317 Application.

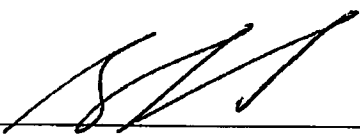
10. I am not aware of lightweight concrete of the claimed density being used in composite building panels having the claimed reinforcing layer and the claimed frame embedded in the concrete, prior to the present invention.

11. To my knowledge, the industry avoided embedding frame members into conventional concrete due to the heat transfer that can occur between the two mediums, which can result in problematic moisture condensate on the interior metal frame members. To my knowledge, this problem was conventionally solved by spacing the frame members a distance apart from the concrete panel.

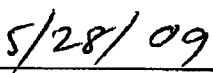
12. I discovered that metal frame members can be successfully embedded in

lightweight concrete. Because lightweight concrete is a better insulator, the problems of heat transfer and moisture condensation are avoided. To my knowledge, the prior art did not recognize this.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Brian Smith



Date